UNIVERSITY OF QUEENSLAND

Computer Centre

WEEKLY NEWSLETTER

Date   : Week ended 24 February 1972
Authorization : Director of the Computer Centre

1. OPERATIONS

1.1 PDP-10 System

Friday	18 February	system failure, offline 1405-1414.
Monday	21 February	system failure, offline 1645-1655.
Tuesday	22 February	disk pack failures repeatedly, system not available 2000-2330.
Wednesday	23 February	end of day accounting, aborted due to disk pack errors the previous night, 0945-1002 system failure, offline 1020-1035, 1625-1650, 2110-2120, 2155-2220.
Thursday	24 February	system failure, offline 1010-1035, 1943-2145.

schedule for forthcoming week: maintenance 0700-0900
                                 operations 0945-2330.

1.2 GE-225 System

schedule for forthcoming week: maintenance 0700-0830
                                 operations 0900-2400.

2. COBOL MANUAL

The COBOL manual, MUT-13, is now available from the Computer Centre. The cost of the manual is $4.20.

3. PDP-10 COBOL

3.1 Teletype Input/Output

There are two methods of addressing the teletype in COBOL:
(i) READ and WRITE
(ii) ACCEPT and DISPLAY

The following points need to be noted when using the teletype:

(a) READ (from the teletype) and WRITE (to the teletype) may both be used in the same program, provided the input and output teletype files are not open simultaneously.

(b) There is nothing to prevent the use of any combination of all four verbs in the one program, provided point (a) is observed. However, special care must be taken with the WRITE verb. It is dangerous to follow it closely with either a DISPLAY or an ACCEPT, as they can interrupt data output via the WRITE verb.

If WRITE, and DISPLAY and/or ACCEPT verbs are being mixed in the same area of program, it is safest to CLOSE the output file before using DISPLAY or ACCEPT.

(c) After a WRITE statement, COBOL always does a carriage return. Therefore, it is best to say
    WRITE record-name BEFORE 1
so that the teletype does a carriage return - line feed.

With the statement
    WRITE record-name AFTER 1
the teletype positions itself at the beginning of the line just output.

3.2 DISPLAY Verb

The COBOL manual does not state any restriction to the number of characters that a user may care to DISPLAY. However, the size of the field to be displayed is stored in a field 10 bits long. The maximum number of characters that can be displayed is thus 1024

characters. Field sizes greater than this will be truncated to
10 bits. For example, only 776 characters will be displayed from
an 1000 character field.

The field named in a DISPLAY statement can be defined in either
the working-storage section or the file section. This is also
true for the ACCEPT statement.

3.3   COBOL Errors

(a)   Condition names

Condition names may not work correctly in some instances.
For example, the following coding

```
77  N-1          PIC 9(10)    USAGE COMP.
88  N-1-C        VALUE 0.
    .
    .
    .
    IF N-1-C GO TO . . .
```

does not create correct code.

4.   RUNOFF

RUNOFF is a PDP-10 program that assists in the production of
memorandums and documents. The material to be documented is
prepared as an ASCII file. Runoff takes this file and produces a
final copy that is formatted, numbered, titled and generally well
presented. The advantage of this method of reproduction is that
changes and amendments can be quickly and easily carried out on
the source file and a new copy produced, without extensive
retyping of the document.

The Computer Centre is endeavouring to prepare as much of its
documentation this way as possible. Users may have noticed that
the Newsletter and the Bulletin are now being prepared with the
help of Runoff. A manual on Runoff is currently in preparation
and it is hoped that it will be released soon.

5.   BASIC ERRORS

There are a number of typographical errors in the Basic manual,
MNT-9. These will be corrected in due course when a revision is

brought out for the manual.

(a)   page 1-8, line 4

   18*X↑N should be 18↑N*X

(b)   page 4-1

   After the lines

   NEW)

       if you are going to create a new program.

   the words: 'BASIC responds with the following: NEW OR OLD—'
   are superfluous.

(c)   page 4-4

   Before section 4.6, the reentry command, '.BAS)' has been
   omitted.

(d)   page 5-2, line 2

   18*X↑D should be 18↑D*X

(e)   page 8-5, line -8

   the line '(-<-YZ' should be ' (-<-YZ'